



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

NOV 26 2018

Mr. Ravi Ramalingam, Chief  
Consumer Products and Air Quality Assessment Branch  
Air Quality Planning and Science Division  
California Air Resources Board  
P.O. Box 2815  
Sacramento, California 95812

Dear Mr. Ramalingam:

Thank you for your submission of the California Air Resources Board (CARB) *Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, July 2018* ("Plan") on July 30, 2018. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the Plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this letter, EPA also approves the following system modification: the relocation of the White Cloud Mountain site (AQS ID: 06-057-0007). We also approve the sampling waiver renewal request for 1:6 day sampling for five PM<sub>2.5</sub> sites: Colusa (AQS ID: 06-011-1002), Lakeport (AQS ID: 06-033-3001), Roseville (AQS ID: 06-061-0006), Redding (AQS ID: 06-089-0004), and Woodland (AQS ID: 06-113-1003), and O<sub>3</sub> season waivers for six O<sub>3</sub> sites: Echo Summit (AQS ID: 06-017-0012), Cool (AQS ID: 06-017-0020), Jerseydale (AQS ID: 06-043-0006), White Cloud Mountain (AQS ID: 06-057-0007), Sutter Buttes (AQD ID: 06-101-0004), and Tuscan Buttes (AQS ID: 06-103-0004) for October 2018-March 2019. Please note that an updated request including 2018 data will be required for future ozone season waiver approvals after March 31, 2019. More information about these approvals is included in enclosures A and D.

In the State of California, ten district monitoring agencies submitted annual monitoring network plans this past year in accordance with 40 CFR 58.10. EPA received plans covering the 2017 calendar year from:

- Bay Area Air Quality Management District,
- Great Basin Unified Air Pollution Control District,

- Monterey Bay Unified Air Pollution Control District,
- North Coast Unified Air Pollution Control District,
- Sacramento Metropolitan Air Quality Management District,
- Santa Barbara County Air Pollution Control District,
- San Diego County Air Pollution Control District,
- San Joaquin Valley Air Pollution Control District,
- San Luis Obispo County Air Pollution Control District, and
- South Coast Air Quality Management District.

EPA has reviewed and approved all of the monitoring agency plans listed above. EPA has provided specific comments on the plans we received from California local agencies through separate letters and have forwarded these to CARB. Please refer to these responses for additional comments pertinent to CARB's network.

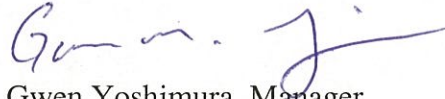
Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. The first enclosure (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Items highlighted in green in enclosure A require attention in order to improve next year's plan. Some annual network plans submitted by local agencies included sites operated by CARB. Missing or deficient information for CARB sites in local agency plans was addressed in the approval letters for each local agency. For convenience, we are providing a synthesized list of these issues in *Enclosure B. Elements Related to CARB Sites in Local Agency Plans Where EPA is Not Taking Action*.

CARB received comments from the Northern Sonoma County Air Pollution Control District (NSCAPCD) and Comit  Civico Del Valle, Inc. on specific portions of the Plan during the public comment period. CARB's responses to these comments were included with the Plan submittal. EPA has determined that CARB's responses to the comments are adequate and has provided a supplemental response to NSCAPCD and Comit  Civico Del Valle, Inc.'s comments in the third enclosure (*C. EPA Response to Comments*).

All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

If you have any questions regarding this letter or the enclosed comments, please feel free to contact me at (415) 947-4134 or Dena Vallano (415) 972-3134.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gwen Yoshimura', with a long horizontal flourish extending to the right.

Gwen Yoshimura, Manager  
Air Quality Analysis Office

Enclosures:

- A. Annual Monitoring Network Plan Checklist
- B. Elements Related to CARB Sites in Local Agency Plans Where EPA is Not Taking Action
- C. EPA Response to Comments
- D. EPA Approval of Relocation of White Cloud Mountain Site

cc (via email): Jin Xu, CARB

Kathy Gill, CARB  
Michael Miguel, CARB  
Michael Werst, CARB  
Sylvia Vanderspek, CARB  
Webster Tasat, CARB  
Ranjit Bhullar, CARB



## A. ANNUAL MONITORING NETWORK PLAN CHECKLIST

(Updated July 10, 2018)

Year: 2018

Agency: California Air Resources Board (CARB)

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) shall provide for the documentation of the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations that can include FRM, FEM, and ARM monitors that are part of SLAMS, NCore, CSN, PAMS, and SPM stations.

40 CFR 58.10(a)(1) further directs that, “The plan shall include a statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E of this part, where applicable. The Regional Administrator may require additional information in support of this statement.” On this basis, review of the ANPs is based on the requirements listed in 58.10 along with those in Appendices A, C, D, and E.

EPA Region 9 will not take action to approve or disapprove any item for which Part 58 grants approval authority to the Administrator rather than the Regional Administrators, but we will do a check to see if the required information is included and correct. The items requiring approval by the Administrator are: NCore, and Speciation (STN/CSN).

Please note that this checklist summarizes many of the requirements of 40 CFR Part 58, but does not substitute for those requirements, nor do its contents provide a binding determination of compliance with those requirements. The checklist is subject to revision in the future and we welcome comments on its contents and structure.

Key:

White	meets the requirement
Yellow	requirement is not met, or information is insufficient to make a determination. Action requested in next year’s plan or outside the ANP process.
Green	item requires attention in order to improve next year’s plan.

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
<b>GENERAL PLAN REQUIREMENTS</b>					
1.	Submit plan by July 1 <sup>st</sup>	58.10 (a)(1)	Yes, cover letter	No	Plan submitted on July 30, 2018
2.	30-day public comment / inspection period	58.10 (a)(1); 58.10 (c)	Yes, p. 1 and cover letter	Yes	
3.	Statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E, where applicable	58.10 (a)(1)	Yes, p. 1	Yes	
4.	Modifications to SLAMS network – case when we are not approving system modifications	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	NA	NA	Please coordinate with EPA on anticipated system modifications that were in progress when the plan was written. Note that EPA approval is needed for new FEMs that replace non-FEMs in 2017/2018 (e.g. Grass Valley, Yreka).
5.	Modifications to SLAMS network – case when we are approving system modifications per 58.14	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	Yes, Appendices B, C, and D	Yes	EPA is approving the relocation request for the White Cloud Mountain site with this plan.  See Row 26 for EPA's response on CARB's PM <sub>2.5</sub> sampling frequency waiver renewal request.
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?		Yes, App. D	No, in some instances	Discontinuation of TSP-Pb monitoring at the Fresno-Garland site was approved on Dec 14, 2017.  Please include documentation of the following in next year's plan: <ul style="list-style-type: none"> <li>CARB's request and EPA's June 27, 2018 approval of the relocation of PM<sub>2.5</sub> and PM<sub>10</sub> SLAMs monitoring at the Ridgecrest location</li> <li>CARB's request and EPA's June 2017 approval of the discontinuation of CO and</li> </ul>

<sup>1</sup> Unless otherwise noted.

<sup>2</sup> Response options: NA (Not Applicable), Yes, No, or Incomplete.

<sup>3</sup> Assuming the information is correct.

<sup>4</sup> Response options: NA (Not Applicable) – [reason], Yes, No, Insufficient to Judge, or Incorrect

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
					NO <sub>x</sub> monitoring at the Armory site <ul style="list-style-type: none"> <li>CARB's request and EPA's June 20, 2017 approval of discontinuation of CO monitoring at the El Centro site</li> </ul>
7.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	Yes, pp. 47-48	Yes	CARB is considering the following system modifications: <ul style="list-style-type: none"> <li>Discontinuation of NO<sub>2</sub> and CO monitoring at Santa Maria station</li> <li>Relocation of Placer Lincoln monitoring station</li> </ul> Please work with EPA to ensure that any such system modifications are performed appropriately.
8.	Precision/Accuracy reports submitted to AQS	58.16 (a)	Yes, p. 46	Yes	States that audit results are submitted to AQS quarterly.
9.	Annual data certification submitted	58.15	Yes, p. 46	Yes	Submitted on June 2, 2017
10	Statement that SPMs operating an FRM/FEM/ARM that meet Appendix E also meet either Appendix A or an approved alternative. Documentation for any Appendix A approved alternative should be included. <sup>5</sup>	58.11 (a)(2)	Yes, p. 40	Yes	
11	SPMs operating FRM/FEM/ARM monitors for over 24 months are listed as comparable to the NAAQS or the agency provided documentation that requirements from Appendices A, C, or E were not met. <sup>6</sup>	58.20 (c)	Yes, App. A	Yes	
12	For agencies that share monitoring responsibilities in an MSA/CSA: this agency meets full monitoring requirements or an agreement between the affected agencies and the EPA Regional Administrator is in	App D 2(e)	Yes, p. 15	Yes	

<sup>5</sup> Alternatives to the requirements of appendix A may be approved for an SPM site as part of the approval of the annual monitoring plan, or separately.

<sup>6</sup> This requirement only applies to monitors that are eligible for comparison to the NAAQS per 40 CFR §§58.11(e) and 58.30.

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
	place				
<b>GENERAL PARTICULATE MONITORING REQUIREMENTS (PM<sub>10</sub>, PM<sub>2.5</sub>, Pb-TSP, Pb-PM<sub>10</sub>)</b>					
13	Designation of a primary monitor if there is more than one monitor for a pollutant at a site.	App. A 3.2.3	Yes, App. A	Y, no changes noted	
14	Distance between QA collocated monitors. For low volume PM instruments (flow rate < 200 liters/minute) > 1 m. For high volume PM instruments (flow rate > 200 liters/minute) > 2m. [Note: waiver request or the date of previous waiver approval must be included if the distance deviates from requirement.]	App. A 3.2.3.4 (c) and 3.3.4.2 (c)	Yes	Y, no changes noted	
<b>PM<sub>2.5</sub> –SPECIFIC MONITORING REQUIREMENTS</b>					
15	Document how states and local agencies provide for the review of changes to a PM <sub>2.5</sub> monitoring network that impact the location of a violating PM <sub>2.5</sub> monitor.	58.10 (c)	Yes, p. 15	Insufficient to judge	In future plans, please also include language specifically addressing the requirement set forth in 40 CFR 58.10(c) (e.g., note that this applies to review of changes to a PM <sub>2.5</sub> network, including violating PM <sub>2.5</sub> monitors).
16	Identification of any PM <sub>2.5</sub> FEMs and/or ARMs not eligible to be compared to the NAAQS due to poor comparability to FRM(s) [Note 1: must include required data assessment.] [Note 2: Required SLAMS must monitor PM <sub>2.5</sub> with <u>NAAQS</u> -comparable monitor at the required sample frequency.]	58.10 (b)(13) 58.11 (e)	NA	NA	
17	Minimum # of monitoring <b>sites</b> for PM <sub>2.5</sub> [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D 4.7.1(a) and Table D-5	Yes, pp. 32-33, Table 20	Yes	
18	Requirements for continuous PM <sub>2.5</sub> monitoring (number of monitors and collocation)	App. D 4.7.2	Yes, p. 32, Table 21	Yes	Please keep this requirement in mind as CARB works on the anticipated Calxico site relocation.
19	FRM/FEM/ARM PM <sub>2.5</sub> QA collocation	App. A 3.2.3	Yes, pp. 41-42	Yes	
20	PM <sub>2.5</sub> Chemical Speciation requirements for	App. D 4.7.4	Yes, p. 38	Yes	

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
	official STN sites				
21	Identification of sites suitable and sites not suitable for comparison to the annual PM <sub>2.5</sub> NAAQS as described in Part 58.30	58.10 (b)(7)	Yes, p. 6, App A	Y, no changes noted	
22	Required PM <sub>2.5</sub> sites represent area-wide air quality	App. D 4.7.1(b)	Yes, p. 36, App. A	Y, no changes noted	
23	For PM <sub>2.5</sub> , within each MSA, at least one site at neighborhood or larger scale in an area of expected maximum concentration	App. D 4.7.1(b)(1)	Yes, p. 33, Table 20	Yes	For Table 20, please include Bakersfield-California and Bakersfield-Planiz sites in list of SLAMS sites for the Bakersfield MSA (CY2017 and on).
24	If additional SLAMS PM <sub>2.5</sub> is required, there is a site in an area of poor air quality	App. D 4.7.1(b)(3)	NA	NA	
25	States must have at least one PM <sub>2.5</sub> regional background and one PM <sub>2.5</sub> regional transport site.	App. D 4.7.3	Yes, p. 37	Y, no changes noted	
26	Sampling schedule for PM <sub>2.5</sub> - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4); 58.12(d); App. D 4.7	Yes, pp. 35-36, App. C	No, in some instances	<p>Grass Valley did not meet the required every day sampling frequency for most of 2017. However, Northern Sierra Unified AQMD installed a FEM BAM at the Grass Valley site on Dec 6, 2017, which now meets the sampling frequency requirement.</p> <p>Ridgecrest did not meet the required every day sampling frequency for most of 2017. However, Eastern Kern replaced their FRM with an FEM BAM in November 2017, which now meets the sampling frequency requirement.</p> <p>Yreka does not meet the required every day sampling frequency for 2017. The plan states that Siskiyou County APCD is currently conducting parallel monitoring in anticipation of replacing the existing FRM monitor at Yreka with an FEM BAM.</p> <p>On July 30, 2017 CARB submitted a sampling waiver renewal request for five PM<sub>2.5</sub> sites:</p>



	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
					(Colusa (06-011-1002), Roseville (06-061-0006), Redding (06-089-0004), Lakeport (06-033-3002), and Woodland (06-113-1003). EPA approves this waiver request for all sites. The initial waiver request for Lakeport was sent directly by the Lake County AQMD (documentation included in App D of CARB's plan).
27	Frequency of flow rate verification for automated and manual PM <sub>2.5</sub> monitors	App. A 3.2.1	Yes, p. 45, App. A	Yes	
28	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for PM <sub>2.5</sub> monitors [Note: 5 - 7 month interval is recommended but not a requirement.]	App. A 3.2.2	Yes, App. A	Yes	

#### PM<sub>10</sub> –SPECIFIC MONITORING REQUIREMENTS

29	Minimum # of monitoring sites for PM <sub>10</sub> [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D, 4.6 (a) and Table D-4	Yes, pp. 28-29, Table 17	Yes	Table 17 notes that certain sites were impacted by wildfire smoke in 2017 that may affect minimum monitoring requirements in these MSAs. Please work with EPA to ensure that minimum monitoring requirements continue to be met in the future.
30	Manual PM <sub>10</sub> method collocation (note: continuous PM <sub>10</sub> does not have this requirement)	App. A 3.3.4	Yes, p. 42	Yes	
31	Sampling schedule for PM <sub>10</sub>	58.10 (b)(4); 58.12(e); App. D 4.6	Yes, p. 31	Yes	
32	Frequency of flow rate verification for automated and manual PM <sub>10</sub> monitors	App. A 3.3.1 and 3.3.2	Yes, p. 45, App A	Yes	
33	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for PM <sub>10</sub> monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App. A 3.3.3	Yes, App A	Yes	

#### Pb –SPECIFIC MONITORING REQUIREMENTS

34	Minimum # of monitors for non-NCore Pb [Note: Only monitors considered to be required SLAMs	App D 4.5	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements
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	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
	are eligible to be counted towards meeting minimum monitoring requirements.]				discussed (pg 27).
35	Pb collocation: for non-NCORE sites	App A 3.4.4 and 3.4.5	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
36	Any source-oriented Pb site for which a waiver has been granted by EPA Regional Administrator	58.10 (b)(10)	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
37	Any Pb monitor for which a waiver has been requested or granted by EPA Regional Administrator for use of Pb-PM <sub>10</sub> in lieu of Pb-TSP	58.10 (b)(11)	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
38	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
39	Sampling schedule for Pb	58.10 (b)(4); 58.12(b); App A 3.4.4.2 (c) and 3.4.5.3 (c)	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
40	Frequency of flow rate verification for Pb monitors audit	App A 3.4.1 and 3.4.2	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).
41	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for Pb monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App A 3.4.3	NA, p. 27	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed (pg 27).

#### GENERAL GASEOUS MONITORING REQUIREMENTS

42	Frequency of one-point QC check (gaseous)	App. A 3.1.1	Yes, App. A	Not meeting requirement	The requirement is for one-point QC checks to be performed at least once every two weeks. Sonora-Barretta Street O <sub>3</sub> lists frequency of checks as monthly.
43	Date of Annual Performance Evaluation (gaseous) conducted in <b>CY2017</b>	App. A 3.1.2	Yes, App. A	Yes	

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>

#### **O<sub>3</sub> –SPECIFIC MONITORING REQUIREMENTS**

44	Minimum # of monitoring sites for O <sub>3</sub> [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] [Note 3: monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR Appendix E, Table E-1) cannot be counted towards meeting minimum monitoring requirements]	App D 4.1(a) and Table D-2	Yes, pp. 18-20	Yes	
45	Identification of maximum concentration O <sub>3</sub> site(s)	App D 4.1 (b)	Yes, pp. 19-20	Yes	
46	Sampling season for O <sub>3</sub> (Note: Waivers must be renewed annually. EPA expects agencies to submit re-evaluations of the relevant data each year with the ANP. EPA will then respond as part of the ANP response.)	58.10 (b)(4); App D 4.1(i)	Yes, p. 21, App. A, App. B	Yes	Please note that an updated waiver request, including 2018 data, will be required for future ozone season waiver approvals after March 31, 2019.
47	A plan for making Photochemical Assessment Monitoring Stations (PAMS) measurements, if applicable. The plan shall provide for the required PAMS measurements to begin by June 1, 2019.	58.10 (a)(10)	NA	NA	

#### **NO<sub>2</sub> –SPECIFIC MONITORING REQUIREMENTS**

48	Minimum monitoring requirements for area-wide NO <sub>2</sub> monitor in location of expected highest NO <sub>2</sub> concentrations representing neighborhood or larger scale (operation required by 1/1/13)	App D 4.3.3	NA, p. 22	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed.
49	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO <sub>2</sub> (operation required by January 1, 2013)	App D 4.3.4	NA, p. 24	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed.

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
50	Identification of required NO <sub>2</sub> monitors as either near-road, area-wide, or vulnerable and susceptible population (aka RA40)	58.10 (b)(12)	NA, p. 24	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed.
<b>NEAR ROADWAY – SPECIFIC MONITORING REQUIREMENTS</b>					
<b>In CBSAs ≥ 2.5 million, the following near-roadway minimum monitoring requirements apply:</b>					
51	Two NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	NA, pp. 22-23	NA	None required for the districts/areas covered in detail by the CARB ANP.
52	One CO monitor	App. D 4.2.1(a); 58.13(e)(2)	NA, p. 25	NA	None required for the districts/areas covered in detail by the CARB ANP.
53	One PM <sub>2.5</sub> monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	NA, p. 32	NA	None required for the districts/areas covered in detail by the CARB ANP.
<b>In CBSAs ≥ 1 million and AADT ≥ 250K, the following near-roadway minimum monitoring requirements apply:</b>					
54	Two NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	NA, pp. 22-23	NA	None required for the districts/areas covered in detail by the CARB ANP.
55	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	NA, p. 25	NA	None required for the districts/areas covered in detail by the CARB ANP.
56	One PM <sub>2.5</sub> monitor (by 1/1/2017)	App. D 4.7.1(b)(2); 58.13(f)(2)	NA, p. 32	NA	None required for the districts/areas covered in detail by the CARB ANP.
<b>In CBSAs ≥ 1 million and ≤ 2.5 million AND AADT &lt; 250K, the following near-roadway minimum monitoring requirements apply:</b>					
57	One NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3)	NA, pp. 22-23	NA	None required for the districts/areas covered in detail by the CARB ANP.
58	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	NA, p. 25	NA	None required for the districts/areas covered in detail by the CARB ANP.

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
59	One PM <sub>2.5</sub> monitor (by 1/1/2017)	App. D 4.7.1(b)(2); 58.13(f)(2)	NA, p. 32	NA	None required for the districts/areas covered in detail by the CARB ANP.

#### SO<sub>2</sub> –SPECIFIC MONITORING REQUIREMENTS

60	Minimum monitoring requirements for SO <sub>2</sub> based on PWEI and/or RA required monitors under Appendix D 4.4.3 [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.4	NA, p. 26	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed.
61	Monitors used to meet Data Requirements Rule (operational no later than January 1, 2017.)	51.1203(c)	NA, p. 26	NA	None required for the districts/areas covered in detail by the CARB ANP. General requirements discussed.

#### NCORE –SPECIFIC MONITORING REQUIREMENTS

62	NCore site and all required parameters operational: year-round O <sub>3</sub> , SO <sub>2</sub> , CO, NO <sub>y</sub> , NO, PM <sub>2.5</sub> mass, PM <sub>2.5</sub> continuous, PM <sub>2.5</sub> speciation, PM <sub>10-2.5</sub> mass, resultant wind speed at 10m, resultant wind direction at 10m, ambient temperature, relative humidity. NO <sub>y</sub> waiver, if applicable.	App. D 3(b)	NA, p. 39	NA	None required for the districts/areas covered in detail by the CARB ANP.  CARB had received approval for discontinuation of Pb monitoring at the Fresno-Garland NCore site in April 2017.
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#### SITE OR MONITOR - SPECIFIC REQUIREMENTS (OFTEN INCLUDED IN DETAILED SITE INFORMATION TABLES)

63	AQS site identification number for each site	58.10 (b)(1)	Yes, App. A	Y, no changes noted	
64	Location of each site: street address and geographic coordinates	58.10 (b)(2)	Yes, App. A	Y, no changes noted	
65	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	Yes, App. A	Y, no changes noted	
66	Parameter occurrence code for each monitor	Needed to determine if other requirements (e.g., min # and collocation)		Y, no changes noted	



	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
		are met			
67	Basic monitoring objective for each monitor	App D 1.1; 58.10 (b)(6)	Yes, App. A	Y, no changes noted	
68	Site type for each monitor	App D 1.1.1	Yes, pp. 9-10, App. A	Y, no changes noted	North Sonoma County APCD requested that the Healdsburg ozone monitor site type be changed to “general background”, but this change was not documented in the network plan. Please update this information in next year’s plan.
69	Monitor type for each monitor, and Network Affiliation(s) as appropriate	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes, pp. 11-12, App. A	Y, no changes noted	
70	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	Yes, pp. 9-10, App. A	Y, no changes noted	North Sonoma County APCD requested that the Healdsburg ozone monitor spatial scale be changed to “urban”, but this change was not documented in the network plan. Please update this information in next year’s plan.
71	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes, App. A	Y, no changes noted	
72	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2	Yes, App. A	Y, no changes noted	
73	Sampling start date for each monitor	Needed to determine if other requirements	Yes, App. A	Y, no changes noted	

	<b>ANP requirement</b>	<b>Citation within 40 CFR 58<sup>1</sup></b>	<b>Was the information submitted?<sup>2</sup> If yes, section or page #s.</b>	<b>Does the information provided<sup>3</sup> meet the requirement?<sup>4</sup></b>	<b>Notes</b>
		(e.g., min # and collocation) are met			
74	Distance of monitor from nearest road	App E 6	Yes, App. A	Y, no changes noted	
75	Traffic count of nearest road	App E	Yes, App. A	Insufficient to judge	Please indicate traffic count years in next year's plan.
76	Groundcover	App E 3(a)	Yes, App. A	Incorrect in one instance	Auburn-Atwood Road's groundcover is listed as a roof surface, not surrounding ground cover. Please correct in next year's plan, if applicable.
77	Probe height	App E 2	Yes, App. A	Insufficient to judge in one instance	Blythe-Murphy O <sub>3</sub> monitor does not list a probe height. Please clarify in next year's plan.
78	Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	App E 2	Yes, App. A	Y, no changes noted	
79	Distance from obstructions on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(b)	Yes, App. A	Y, no changes noted	
80	Distance from obstructions not on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(a)	Yes, App. A	Not meeting requirement in one instance	40 CFR 58 Appendix E indicates that the distance to any obstruction must be at least twice the height of the obstruction above the probe. The Calexico-Ethel Street PM <sub>10</sub> POC 1 monitor does not meet this requirement.
81	Distance from the drip line of closest tree(s)	App E 5	Yes, App. A	Not meeting requirement in one instance	40 CFR 58 Appendix E states that the probe, inlet, or at least 90 percent of the monitoring path must be at least 10 meters or further from the drip line of trees. The Calexico-Ethel Street monitors do not meet this requirement.
82	Distance to furnace or incinerator flue	App E 3(b)	Yes, App. A	Y, no changes noted	
83	Unrestricted airflow (expressed as degrees around probe/inlet or percentage of monitoring path)	App E, 4(a) and 4(b)	Yes, App A	Y, no changes noted	
84	Probe material (NO/NO <sub>2</sub> /NO <sub>y</sub> , SO <sub>2</sub> , O <sub>3</sub> ; For PAMS: VOCs, Carbonyls)	App E 9	Yes, App. A	Insufficient to judge in some instances	Please verify whether the "glass" or "Pyrex" listed for Healdsburg-Municipal Airport, Red Bluff-Walnut Street, El Rio, Ojai, Piru, Simi Valley, Thousand Oaks, and Redding-Health Department

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
					monitors are referring to borosilicate glass. Our understanding is that Pyrex no longer exclusively uses borosilicate glass.  Blythe-Murphy O <sub>3</sub> monitor does not list a probe material. Please clarify in next year's plan.
85	Residence time (NO/NO <sub>2</sub> /NO <sub>y</sub> , SO <sub>2</sub> , O <sub>3</sub> ; For PAMS: VOCs, Carbonyls)	App E 9	Yes, App. A	Y, no changes noted	

### Public Comments on Annual Network Plan

Were comments submitted to the S/L/T agency during the public comment period?	Yes. Appendix E.
Were comments included in ANP submittal?	Yes.
Were any of the comments substantive? If yes, which ones? If comments were not substantive provide rationale.	No. Comments from NSCAPCD and Comite Civico Del Valle, Inc. were general/clarifying comments and/or were not specifically related to the approvability of specific items in the plan.
Were S/L/T responses to substantive comments included in ANP submittal?	NA
Were the S/L/T responses to substantive comments adequate?	NA
Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?	NA. EPA has included additional clarification on certain non-substantive comments.
Are the sections of the annual network plan that received substantive comments approvable after consideration of comments? If yes, provide rationale	NA

## **B. Elements Related at CARB Sites in Local Agency Plans where EPA is Not Taking Action**

We are not acting on the portions of annual network plans where either EPA Region 9 lacks the authority to approve specific items of the plan, or EPA has determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met.

- EPA identified items in the following annual monitoring network plan where a requirement was not being met or information in the plan was insufficient to judge whether the requirement was being met based on 40 CFR 58.10 and the associated appendices. Therefore, we are not acting on the following items:

Item	Checklist Row	Issue
Distance of monitor from nearest road	Santa Barbara, 73	Not meeting requirement in one instance
Dates of two semi-annual flow rate audits conducted in CY2017 for PM <sub>2.5</sub> monitors	SJV, 28	Not meeting requirement in two instances
Minimum # of monitoring sites for PM <sub>10</sub>	SJV, 29	Not meeting requirement in one instance
Dates of two semi-annual flow rate audits conducted in CY2017 for PM <sub>10</sub> monitors	SJV, 33	Not meeting requirement in two instances
Distance from trees	SJV, 81	Not meeting requirement

In addition, the following comments were made in EPA's annual network plan approval letters for the following agencies:

### **Santa Barbara Air Pollution Control District:**

- [Item 44] Santa Maria (06-083-1008) does not meet the traffic count/distance requirement for neighborhood or urban scale due to proximity to S. Broadway. Minimum number of monitoring sites requirement is still met with the remaining five SLAMS sites. A note to this effect should be included in future annual network plans.

### **Sacramento Metropolitan Air Quality Management District:**

- [Item 54] As noted in the plan, the highest AADT in the Sacramento MSA exceeds the 250,000 AADT criteria. Thank you for continuing to work with EPA and CARB to determine the appropriate timeline associated with the implementation of a 2<sup>nd</sup> near-roadway NO<sub>2</sub> monitor.

### **San Joaquin Valley Air Pollution Control District:**

- [Item 7] EPA Region 9 is not taking action on the Type 3 PAMS site requirement for the Bakersfield MSA. Upon resolution of issues noted on p. 36-37 of the plan, EPA Region 9 will work with SJVAPCD on this proposed modification to the PAMS network.

- [Item 31] Also, the sampling frequency for PM<sub>10</sub> monitoring at Oildale shifted to 1:3 starting in 2017. CARB installed a continuous monitor at the site in June 2017. SJVAPCD's plan still lists the sampling frequency as 1:6 in Table 27. Please update this information in next year's plan.
- [Item 48] The Parlier site is operational and meeting this requirement. The replacement Arvin monitor is yet to be operational.

Since the PAMS replacement site in Arvin is yet to be approved and operational (Item 7), the Bakersfield-Muni site temporarily serves as one of the two RA40 sites until the Arvin NO<sub>2</sub> monitor is reestablished.

- [Items 57, 58, 59] Fresno CBSA 2017 estimated population is near 1 million (995, 975). Near-road NO<sub>2</sub>, PM<sub>2.5</sub> and CO monitoring will be required if/when the population >1 million. Fresno near-road NO<sub>2</sub> monitoring is operational and Bakersfield near-road monitoring is anticipated to be operational in 2018.



### **C. EPA Response to Comments**

This enclosure serves as a response from the EPA to Northern Sonoma County Air Pollution Control District (NSCAPCD) and Comit  Civico Del Valle, Inc.'s comments with respect to the California Air Resources Board's (CARB's) 2018 annual network plan.

NSCAPCD and Comit  Civico Del Valle, Inc. submitted comments to CARB on June 30, 2018, during the comment period held by CARB on its proposed 2018 annual monitoring network plan (Plan). CARB responded to these comments in the final Plan submitted to EPA on July 30, 2018. CARB responses adequately addressed NSCAPCD and Comit  Civico Del Valle, Inc.'s comments. In this enclosure, we have provided additional clarification on certain responses from CARB.

#### ***NSCAPCD Comment 1:***

The NSCAPCD chose to install these sites for its own study purposes. The PM-10 monitors were sited at a neighborhood scale and the Ozone site at an urban scale to support NSCAPCD planning activities. The NSCAPCD has never had an obligation triggered under 40CFR Part 58 (4.1&4.4); nor are any of the NSCAPCD monitors part of a NSCAPCD SIP or non-attainment plan obligation. 40CFR Part 58(2)(e) provides that monitoring requirements apply separately to each affected State or local agency in the absence of an agreement between the affected agencies and the EPA Regional Administrator. The NSCAPCD is not aware of any such agreement and so the State monitoring plan should recognize, absent such an agreement, that NSCAPCD monitors are only for its district purposes.

#### ***CARB Response:***

Table 8 in this ANP contains a list of Core-Based Statistical Areas (CBSAs) and associated air districts for California, and shows Northern Sonoma is a part of the Santa Rosa Metropolitan Statistical Area. For CBSAs that include multiple districts, fulfillment of minimum monitoring requirements is dependent upon coordination between air monitoring staff, particularly when changes to the monitoring network are considered. The Roles and Responsibilities documents developed by CARB are available on the CARB website at [http://www.arb.ca.gov/aaqm/qa/pqao/repository/rr\\_docs.htm](http://www.arb.ca.gov/aaqm/qa/pqao/repository/rr_docs.htm)

***EPA Response:*** As NSCAPCD points out in its comment, according to 40 CFR 58 Appendix D, section (2)(e), full monitoring requirements apply separately to each affected State or local agency or an agreement between the affected agencies and the EPA Regional Administrator must be in place to share monitoring responsibilities. The EPA recognizes that there may be situations where air monitoring agencies may choose to share overall Metropolitan Statistical Area (MSA)/CBSA monitoring responsibilities and requirements across agencies to achieve an effective network design paired with effective use of resources, especially in cases where the MSA/CBSA crosses political boundaries or more than one air shed. NSCAPCD, CARB, and the Bay Area Air Quality Management District share jurisdiction over portions of the Santa Rosa MSA. In addition to the CARB Roles and Responsibilities document, which formalizes the roles

and responsibilities of CARB and NSCAPCD, EPA encourages these three agencies to develop an agreement that clarifies monitoring responsibilities, especially as regards minimum monitoring requirements.

***NSCAPCD Comment 3:***

EPA's 2016 Exceptional Rule Plan states that exceptional events will ensure that air quality measurements are properly evaluated and characterized with regard to their causes and not be used to impose unreasonable planning requirements on Agencies. In the last 15 years, NSCAPCD's four PM<sub>10</sub> monitors have only had a total of two exceptional events and no other exceedances of a standard. EPA states that the Rule provides a mechanism by which air quality data can be excluded from regulatory decisions and actions. Given the rarity of exceptional events in NSCAPCD history and the extreme, unpredictable nature of the 2017 wildfire, the NSCAPCD has tagged the affected data blocks and expects that the intent of the exceptional events rule will be implemented and not used in a punitive manner for calculation of federal or state AAQS or monitor siting requirements. Please verify and advise if our understanding of this process is correct.

***CARB Response:***

The Exceptional Events Rule outlines specific types of regulatory decisions to which the provisions apply. It includes a category for "other actions on a case-by-case basis". Use of this category would necessitate the submission of a full exceptional event document. EPA is developing a document, Draft Guidance for Excluding Some Ambient Pollutant Concentration Data from Certain Calculations and Analyses for Purposes Other than Retrospective Determinations of Attainment of the NAAQS (also known as the "Alternative Path"). The monitoring siting and scheduling requirements may be addressed under this Guidance, but we have not seen anything yet to confirm this. Based on the number of monitors currently operating in the district, there are no measures that need to be taken in regard to monitor siting requirements.

***EPA Response:*** There is no existing regulatory mechanism to exclude data from minimum monitoring requirements or other regulatory determinations such as monitor siting and sampling frequency. As CARB noted, EPA is working to develop guidance that will delineate determinations for which data exclusion must satisfy the revised Exceptional Events Rule (EER), those that are not covered by the scope of the EER but for which the exclusion, selection, or adjustment of data may be appropriate and allowable under other existing sections of the Clean Air Act (CAA) and EPA rules or guidance, and those where there is no existing mechanism to exclude data. Should NSCAPCD have a violating PM<sub>10</sub> design value in the future, EPA would be happy to discuss how this might affect the District and address any concerns NSCAPCD may have.

***NSCAPCD General Comment:***

Unlike past years, this year's ANP draft includes actual and estimated population values. 40CFR SLAMS Minimum Monitoring Requirements states that population shall be based on the "latest available census figures." What is the purpose of including estimated population values in this

report when it is not called for in the CFR? NSCAPCD is unsure how to comment when both actual census data and estimated values are included, with two very different potential monitoring requirements.

***CARB Response:***

This year's ANP uses 2010 Census population numbers to determine the official minimum monitoring requirements. Upon direction from U.S. EPA, this ANP also includes the most recent available population census estimates to preview any possible future changes to these requirements (see page 18 in the ANP).

***EPA Response:***

As CARB noted, EPA has requested in prior annual network plans that agencies should include the official 2010 census population numbers and also include the most recent available census estimates to indicate any potential changes to minimum monitoring requirements that may need to be addressed in future annual network plans. EPA recognizes that population numbers can vary year to year. However, if population estimates are consistently over a certain threshold, EPA will engage in discussions with the monitoring agencies to determine an appropriate path forward.

***Comite Civico Del Valle, Inc. Comment:***

Allocation of resources in the methods described in the Draft show weakness in air quality standards when assisting communities that are in nonattainment. These communities will never receive the support that is needed because there will never be enough data to quantify sources in the communities that have weak air district enforcement. This in turn leads California community residents lacking confidence in the regulatory agencies responsible for protecting public health and minimizing air quality impacts.

***CARB Response:***

Federal requirements on air monitoring networks have been set to assess national/regional air quality issues (such as welfare-related impacts and regional transport), and to the extent practicable, community air quality conditions. All monitors in Imperial County were deployed to provide a better understanding of population exposure and capture the highest concentration at the neighborhood scale, providing a greater understanding of air quality in and around specific locations within Imperial County.

Logistical constraints associated with higher-cost regulatory grade monitoring devices have tended to limit the size of regulatory air monitoring networks. The emergence and proliferation of low cost sensor technology in recent years has made possible the deployment of community air monitoring networks. Regulatory monitoring networks can now be informed by community networks such as the IVAN network operated by Comite Civico del Valle. Community air monitoring using a network of lower-cost sensors provides important information about air quality levels in areas away from regulatory monitors. Such information can be very helpful for taking actions to meet air quality standards in all areas.

***EPA Response:***

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) include information regarding the regulatory criteria pollutant ambient air monitoring networks. The criteria within the ANP are used by EPA in evaluating the adequacy of the regulatory air pollutant monitoring networks. The EPA supports additional community monitoring efforts such as the IVAN network. Such non-regulatory and sensor-based air monitoring programs can be used to fill gaps in spatial and temporal air monitoring knowledge from traditional regulatory population-based air monitoring networks. These non-regulatory technologies can be very helpful in providing additional air monitoring information, especially during air quality events, to sensitive populations and the broader general public.

#### **D. EPA Approval of Relocation of White Cloud Mountain Site**

Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. The seasonal O<sub>3</sub> SLAMS monitor relocation from the White Cloud Mountain site (AQS ID: 06-057-0007) to a nearby United States Forest Service (USFS) location also at White Cloud Mountain was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(6).

40 CFR 58.14(c)(6) describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5) and states that, “[a] SLAMS monitor...may be moved to a nearby location with the same scale of representation if logistical problems beyond the State’s control make it impossible to continue operation at its current site.”

CARB noted in the *Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, July 2018* that the USFS plans to expand helitack operations at the current site location and advised CARB that this location will no longer be available. The current site was not operational in 2017 and the new site is targeted to be operational by 2019.

The replacement site, located in a hillside clearing near the near the White Cloud USFS Remote Automated Weather Station, is located approximately 300-335 meters away from the existing location and expected to measure similar O<sub>3</sub> concentrations from similar sources due to the consistency in land uses and proximity to sources. CARB further notes that the new location is expected to improve siting by having no nearby buildings, will be positioned further from dense trees than the current site, and have similar vehicular emission impacts.

Based on the assessment of proximity, land use, nearby sources, and anticipated concentrations above, EPA has determined CARB’s request meets the requirement that the replacement site is at a nearby location with the same scale of representation and approves CARB’s relocation of the White Cloud Mountain O<sub>3</sub> SLAMS monitor to the proposed site location on USFS property.

This approval assumes that the new site will meet all 40 CFR 58 requirements, including the siting requirements specified in Appendix E, as described in the site table for the proposed site in CARB’s 2017 ANP. Please work with EPA to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site.